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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,646	10/05/2000	Stephen Bloomfield	P06892US00/LRP	8442

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/16/2003

*10*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/679,646

Applicant(s)

BLOOMFIELD ET AL

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 10-08-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Applicant's election of Group I, claims 1-10 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The specification has not been checked to the extent necessary to determine the presence of the possible minor errors e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The preamble of claim 1 recites "Process for the manufacture of a concentrated solution", however, the body of the claim does not recite any manufacturing step (with reaction), but recites only the distillation and evaporation steps (both are physical unit of operations).
- b. The claims do not recite positive, explicit, physical process steps but recite passive terms which makes the actual steps vague and indefinite. For example, in claim 1 "by distillation and evaporation" "are carried out in a distillation column..." etc.

- c. The term "easy" in claim 1 is a relative term which renders the claim indefinite. The term "easy" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- d. There are no proper antecedent basis for basis for supports in the claims for the following claimed languages.
  - i. "The solution leaving the bottom of the distillation column" (not initially recited in the base claim);.
  - ii. "The distribution" in claim 4, (c); and
  - iii. "...heating medium" in claim 7.
- e. Grammatical correction and use of US technical terminology should be made in the claims. For example "...at its narrowest point" claim 2; and from "vapour" to --vapor-- in claims 4 and 7.
- f. In claim 4, line 2, "one or more" should be—at least one—to remove the alternative "or".
- g. It is unclear what "liquid" is being referred to in claim 5 especially since claim 1 does not mention any liquid.
- h. Claim 7 is confusing as the step (d) in claim 7 is not in claim 4 (d) step.
- i. The claimed "arising for it" is inept.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claim 1 is rejected under 35 U.S.C. 102(e) as anticipated by Schneider or GB '439.

GB '439 or Schneider is deemed to anticipate or renders obvious the process "for the manufacture of a concentrated solution by distillation and evaporation of a dilute solution, in which the distillation and the evaporation are carried out in a distillation column and an evaporator which constitute two distinct pieces of equipment..." as broadly claimed in claim 1.

Claims 1-6, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider or GB (590,439) in view of EP '107 and Peter (3,856,632).

GB '439 or Schneider is discussed supra.

The EP '107 is applied to teach that using a distributor as claimed e.g. in claim 2 is an obvious expediency in the art. To incorporate EP '107 teachings above to Schneider or GB '439 process would have been obvious to one of ordinary skill in the art for the advantage taught e.g. at page 3, lines 14-27 of the EP '107 reference.

Claim 6 which is directed to pressure, and claim 10 which is directed to the percentage w/w are deemed to be result—effective variables which ordinarily are within the skilled of the art. See e.g. GB '439 disclosure at page 1, lines 50-52 and lines 102-105. Regarding the negative provision of using no recirculation of liquid in claim 5, it would be obvious to one of ordinary skill to omit the recirculation when its function is not desired in absence of showing of unexpected results flowing from such omission. The concept of such omission is recognized in the art of distillation. Peter for example

teaches at col. 5, lines 1-37 that a point will be reached at which an... evaporator system in the recirculation, no longer produces any substantial advantages... In such a case the... system is preferably designed as a once through system.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider and GB '439.

It would have been obvious to use hot water as a heating medium in the process of concentrating a dilute solution of hydrogen peroxide as claimed e.g., in claim 7 as such is conventionally used as an alternative source of energy. Note e.g., Carden's teaching at col. 7, lines 25-45.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Porshan et al and Standiford et al both disclose carrying-out a process using distinct distillation and evaporation columns.
- b. CN 5103225 Abstract discloses treatment of dilute  $H_2O_2$  solution by two film- evaporation- stages.
- c. Kabisch discloses a process for the production of hydrogen peroxide.

Any inquiry concerning this communication from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can generally be reached on Tuesday--Friday from 7:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone

Application/Control Number: 09/679,646

Page 6

Art Unit: 1764

numbers for the organization where this application is assigned are (703) 872-9311 for regular communications and (703) 308-0651 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

V. Manoharan/dh  
January 10, 2003

*[Handwritten signature]*

*[Handwritten initials]*  
1/10/03